

***Solar Economics Forum
“Telling the Solar Story”
U.S. Rep. Gabrielle Giffords
September 10, 2009***

Good morning everyone. It's great to be with you all today to take part in this important discussion on the future of solar energy.

As many of you may know, I'm relatively new to Washington. I was first elected to Congress in 2006 and I am now serving my second term. I'm proud to say that I have been a strong supporter of solar power since the day I arrived, and it is one of my highest policy priorities.

As a member of the House Science and Technology Committee, I have had an especially good position to advocate for increased solar research and development. In fact, I am working with the committee right now on a bill to reauthorize the solar R&D program at the Department of Energy.

I have been a strong advocate for other pro-solar policies as well, including the investment tax credit, a renewable electricity standard, a manufacturing tax credit, loan guarantees, and workforce development programs. I have also been promoting solar in my other committees, especially the Armed Services Committee, where I have been an outspoken supporter of renewable energy leadership by our military.

People sometimes ask me why I'm such a big fan of solar power. Well, there's no doubt that it helps to represent a district in Arizona, a state with some of the highest solar potential in the world. In my hometown of Tucson we are blessed with over 300 days of sunshine every year and solar power is very popular with my constituents.

But the fact is that our entire country has great solar potential, not just the desert Southwest. Anyone who has ever seen a map showing the solar energy levels received by different areas of the U.S. knows that our entire nation can make effective use of solar power.

So there's lots of solar potential out there. Does that mean tapping it is necessarily a good thing to do? I firmly believe the answer is 'yes', and I'll tell you why.

Since I became a member of Congress, I wake up every morning, and I go to bed each night, thinking about the major issues confronting our nation. Among the largest challenges we face are:

- *How do we create good jobs and get our economy moving again?*
- *How do we ensure our national security in a dangerous world? and*
- *How do we protect our natural environment – especially from the threat of catastrophic climate change?*

Ultimately, the reason I get so excited about solar power is that it offers a viable solution – at least in part – to all of these major challenges. Economic competitiveness, energy independence, and climate protection: solar is truly a win-win-win.

As I was preparing for today and looking through the brochure for the conference, a few lines of text caught my eye. I'd like to read them to you:

“The U.S. solar industry could become the largest solar market in the world and solar can play a significant role in the U.S. energy mix, providing a viable option that addresses environmental and security issues.”

That's a true statement, of course, and it's not really surprising to find it on a brochure for a solar conference. But it is exciting: “solar can play a significant role in the U.S. energy mix...” In my experience, most people simply don't know this!

Over the past several years I've had the privilege of speaking with scores of people working on solar power: researchers, manufacturers, investors, project developers, people from private industry, the Department of Energy, the military, and the non-profit sector. Their message to me has been clear: Solar technology works, it is rapidly getting even better, and it can contribute significantly to meeting our energy needs.

Given what I was saying earlier, about solar's potential to help address some of our most serious challenges, that is fantastic news. There's just one problem: many of my colleagues in Congress don't believe it!

Well, that's not quite true. It's not so much that they don't believe it as they just don't know it. They don't know what solar is capable of.

Most of my colleagues haven't spent as much time as I have keeping up with this industry. They are not aware of the amazing strides solar technology has made in recent years. As a result, their view of solar power and its potential is several years behind the curve.

Many policymakers still see solar as a niche technology, suitable for limited applications. They view it as expensive and unreliable. As for making a "significant contribution to our energy mix," most don't view solar as up to the task. They talk about solar being great sometime in the distant future. But right now? No way. They just don't think today's solar has the muscle to power our industrial economy. They don't see solar power as serious energy.

This view is mistaken. Solar is very serious. Between solar hot water, concentrating solar power, and photovoltaics, solar technologies have the potential to make a dramatic contribution to our energy challenges right now. What's more, many countries in Europe and Asia see solar technology as a great emerging industry in its own right.

But as they say in politics, perception is reality. That, in my view, is the number one challenge facing the solar industry in the United States.

The inaccurate perception of solar power's capabilities can have serious repercussions for U.S. energy policy. Let me give you just one recent example. You all know the House passed a large energy bill at the end of June: the American Clean Energy & Security Act. Among the primary goals of this bill was to establish a program to mitigate climate change. Given that one of the major benefits of solar power is emissions-free electricity, one might think it should figure prominently in the bill.

To be fair, there is significant support for renewables and energy efficiency in general, including a Renewable Electricity Standard and funding for states to implement efficiency and renewable projects. If we use EPA estimates for the value of emissions allowances, the bill would generate about 90 billion dollars between 2012 and 2050 for energy efficiency and renewable energy programs. Unfortunately, none of that is specifically dedicated to solar – or any other

renewable for that matter. But given that solar is not the least-cost renewable, there are some concerns about how much of that support solar will ultimately get.

By contrast, the bill provides up to 60 billion dollars specifically for the development of “clean coal” – a technology that even its supporters concede will not be ready for at least a decade, if ever. Now I’m not opposed to providing some R&D support for coal, but what I find stunning is the difference in levels of assured support.

On the one hand we have solar, a proven suite of technologies built by an emerging industry; on the other hand we have “clean coal,” an unproven technology supported by a mature industry. To deploy either one will require building new infrastructure, so coal offers no particular benefit in that respect. As for prices, the trend for solar is consistently down, while the trend for coal is persistently up. Despite these circumstances coal received tens of billions in assured support. Solar, meanwhile, is eligible for funding, but received no explicit assurances of any deployment support at all.

We are in a race – actually two races – against time. One is to firmly establish the United States as a solar industry leader before other countries open up an unbeatable lead. The other race is to transform our energy system and reduce emissions soon enough to prevent the worst effects of climate change. In these two races, where time is of the essence and financial resources are finite, our lopsided energy policy threatens to have significant consequences.

There are reasons, of course, for why the bill contains such different levels of assured support, and the differences come as no surprise to veteran Hill watchers. We all understand the role of lobbying in our political system. The coal industry has deep pockets and significant resources to get its message out. That probably helps explain their success in this bill.

The solar community, by contrast, is not protecting the status quo – it is selling a vision of the future. It is painting a picture of something that could be, but isn’t yet. As such, its resources and its base of support are much smaller.

But I believe the biggest problem solar has is one of perception. It is too easy to marginalize solar because not enough people take it seriously yet. Many people believe what they’ve been told: coal is up to the task of powering our country and renewables are not. In my opinion, solar will never receive the support it needs to

achieve its full potential until the conventional wisdom changes about what it can do.

If lawmakers understood that solar offers a serious energy solution, its political support would increase substantially. Solar would cease to be a side project and would become a strategic investment. Policymakers would be more likely to discuss the full suite of policies necessary to ensure solar can meet its potential.

Today's solar industry is populated mostly by small companies, each one engaged in a daily struggle to survive. New technologies are still emerging, and while there are some dominant players it is not clear whether they will stay on top. Everyone is busy jockeying for position and growing their own companies.

That's fine. That's capitalism. But we also need to create space for cooperation on a common message. Every solar company, big and small, is affected by the current policy bias toward traditional energy. Consequently, every solar company has a vested interest in updating the conventional wisdom regarding what solar can do.

This challenge is more fundamental than changing policy – it is about changing minds. Once the conventional wisdom changes, the policy will follow.

In short, the solar community must get better about telling its story. It must get into the offices on Capitol Hill and share the exciting news about the tremendous strides made in recent years, and what this industry has to offer America.

This will not be easy – there's a lot of competition for Members' attention on energy these days. But don't get discouraged! Yes, solar is a young industry that can't possibly match coal and oil dollar for dollar. But that just means other means of communication become more important. Individual companies need to establish close relationships with their Representatives in Congress. A visit from a constituent is almost always more effective than a lobbyist visit anyway. Visit often and keep Members and their staffs updated. Make sure they understand the benefits that solar has to offer their communities and their constituents.

Considering the limited financial resources, solar policy has made remarkable progress over the last year. The fact is, solar is popular.

But people need to know that solar is also practical, that it can meet multiple needs of individuals and society at a reasonable cost. I know the industry is working hard, but more effort is needed to spread this message.

Most solar companies tend to view their primary competition as other solar companies. They pour their efforts into developing the best technology. But when it comes to public policy, the entire industry is in the same boat; every solar company currently takes a back seat to fossil fuels. By joining together to get the word out, every solar company will ultimately benefit.

To finish up I'll just share a little bit of what we are working on in my office to spread the word. As I mentioned before, solar is one of our top priorities, and our advocacy efforts extend well beyond introducing legislation.

On the education front, my district office delivers free "Solar 101" seminars across Southern Arizona. These events are designed to help people understand how to go solar themselves, and they often draw standing room crowds. We have also helped organize day-long solar conferences in southern Arizona and in Phoenix.

Many of my recent efforts have involved working with the military on energy. The military is not only one of the largest landowners in the country, it is also one of the biggest energy consumers. So there is tremendous potential for the military to lead in the deployment of solar and other renewables. They are already doing great things and I like to encourage them to move even more aggressively. This will help create demand, drive down costs, and improve our national security in the process.

To improve communication in Arizona, I have recently begun a weekly call with solar leaders across our state. We call this our Solar Hot Team, and the regular communication has been invaluable. It is a great help to know what everyone is working on. Currently, the Hot Team is developing outreach initiatives to educate business and community leaders across the state in the possibilities of solar.

Finally, we are planning the launch of a monthly solar newsletter soon. If you'd like to receive it, I encourage you all to check my website – giffords.house.gov. We will have a sign-up form there soon, and in the meantime you can see all of what we are working on. Just click on the link to "solar news."

If the solar industry is to achieve its full potential in the U.S., good technology will not be enough; we must get the policy right as well. To do that, we must have broad support; and to get that support, people must understand what solar can do.

Solar technology, and the industry as a whole, has made tremendous strides in recent years. Prices continue to fall, performance continues to rise, and real progress is being made on storage. Challenges remain, but the fact is that solar is ready to start making a serious contribution to our nation's energy needs right now. Policy makers need to know that solar is serious energy.

My mission as an elected official is to help move solar policy forward so this country can secure all the benefits solar energy has to offer. We can create good, domestic jobs and get our economy moving again; we can bolster our security and reduce our dependence on foreign energy; and we can protect our natural environment for our children and grandchildren. We can do these things, and we must. Solar makes it possible!

Thank you for being here today and thank you for all that you are doing to move solar forward. Our challenge now – for all of us – is to take our efforts to the next level. We must communicate what this industry is all about and what solar can do. I look forward to working with you!